WHAT IS CLAIMED IS:

1. A method of temporarily attaching two components during an apparatus manufacturing process and then more permanently attaching the two components during a subsequent portion of the apparatus manufacturing process, comprising:

tacking a first component and a second component with an adhesive during an initial phase of the apparatus manufacturing process, the tacking performed by applying a temperature of about 100-300°C and a pressure of about 5-100 psi for about 5-120 seconds to the first component, and then allowing at least a portion of the applied temperature and pressure to be transferred to the adhesive and the second component, the first component having a greater thermoconductivy than the adhesive; and

curing the adhesive during a subsequent phase of the apparatus manufacturing process.

2. The method of claim 1, wherein the first component is a conductor and the second component is an insulator.

3. The method of claim 2, wherein the conductor is a copper strand and the insulator is an insulation strand.

4. The method of claim 3, wherein the adhesive comprises a thermoset material.

5. The method of claim 4, wherein the adhesive is selected from the group consisting of nitrile, phenolic, epoxy, acrylic and the like.

6. The method of claim 1, wherein the tacking is performed at a temperature of about 140-160°C and a pressure of about 10-50 psi for about 15-45 seconds.

7. The method of claim 1, wherein the tacking provides an adhesive bond

strength of about 30-150 psi.

8. The method of claim 1, wherein the subsequent manufacturing operation is a press and bake cycle of a rotor coil manufacturing process that imparts a temperature of about 100-500°C and a pressure of about 100-1,500 psi to the rotor coil.

9. The method of claim 8, wherein the press and bake cycle provides an adhesive bond strength of about 150-500 psi.

10. The method of claim 8, wherein the press and bake cycle is performed after the adhesive is arranged in a rotor slot for reasons independent of curing the adhesive.

11. A method of manufacturing a rotor coil for use within a generator of a power generation plant, comprising:

arranging an adhesive between a strand of conductive material and a strand of insulation material;

applying a temperature of about 100-300°C and a pressure of about 5-100 psi for about 5-120 seconds to the adhesive in order to tack the adhesive to the conductive and insulation materials, thereby forming an insulated conductor stack;

assembling a plurality of stacks to form a nascent rotor coil;

arranging the nascent rotor coil in a rotor slot; and

curing the adhesive after the coil is arranged within the rotor slot.

12. The method of claim 11, wherein the adhesive comprises a thermoset material.

13. The method of claim 12, wherein the adhesive is selected from the group consisting of nitride, phenolic, epoxy, acrylic and the like.

14. The method of claim 11, wherein the tacking is performed at a temperature of about 140-160°C and a pressure of about 10-50 psi for about 15-45 seconds.

15. The method of claim 11, wherein about 5-20 stacks are arranged to form the nascent rotor coil.

16. The method of claim 11, wherein the adhesive is fully cured during a press and bake cycle of the rotor coil manufacturing process.

17. A tacking apparatus, comprising:

a tray adapted to support at least a portion of a component to be tacked, the tray having a positioning device to help position the component on the tray and an urger to help secure the positioned component;

a movable ram adapted to directed a pressure of about 5-100 psi onto the component; and

a heater adapted to direct a temperature of about 100-300°C onto the component,

whereby the directed heat and pressure tack the component, the component including at least two elements and an adhesive, and the adhesive fully cured subsequent to the tack.

18. The apparatus of claim 17, wherein the positioning device is a plurality of dowels arranged on the surface of the tray.

19. The apparatus of claim 17, wherein the urger is a plurality of spring-loaded snap-backs arranged on the surface of the tray.

20. The apparatus of claim 17, wherein a frame is used to vertically elevate the tray.